Some Teaching Tips for New and Old Instructors  
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August 18, 2015

Here are some ideas on teaching that might be helpful.

**Before the first day of class:**
1. Create your syllabus. Include in your syllabus the class time, location, and your office hours. Include a brief description of what the course is about, why it is important, what will be covered, and (if you want) a brief description of some of your teaching tactics. Look for a syllabus that a previous instructor for that course (or other courses) has used and use it as a starting point.
2. What skills do you expect to have coming into your class? Are these expectations realistic? If not, how will that change the way you teach or how fast you cover topic?
3. If possible, lay out a schedule for each class session of the term. You might fall behind or even get ahead of schedule, but the point here is to have a plan.
4. Homework and grading. Figure out how many homeworks you will have, how many projects you will have, and how you will grade them (what does “A” work look like, what does “B” work look like, what does “C” work look like). Be clear to yourself and to the students how you will grade their work. You don’t necessarily need a detailed rubric for everything, but at a minimum have some framework for grading. It would be bad if you graded arbitrarily or, worse yet, randomly.
5. Figure out how grades on individual assignments and exams collectively determine the student’s final grade.
6. Communicate the previous two points (#4 and #5) to students before the course starts or early in the term.
7. Set up your Canvas or web page. Think about how it is organized, what information you want to convey, and how easy it is for students to access it. Think about how students will use your course page. Think of this as an HCI exercise.
8. Think about how the size of your class might influence the way you teach. (For example, will it be easier or harder to conduct class discussions with 30+ vs. 20 students?)
9. What will a “normal” class session look like? What percentage of time will you be lecturing versus doing other things (problem solving, group discussions, student presentations)?

**After classes start:**
1. Figure out as early as possible where your students are in terms of preparation. An early homework assignment or short in-class quiz is a good way to do that. You might have to do a minor (or major) redesign of your course depending on assumptions you made that might be wrong.
2. It’s easy to underestimate how much time it takes to teach a class: preparing for lecture, grading, sending class emails, responding to student emails, preparing code or labs, meeting with students, etc. It can be tricky to balance the demands of teaching with other faculty activities (research, service, committees, etc.). Don’t fall behind.
3. Grade consistently. You set your expectations in class by what you do, and then you need to follow up in your grading.
4. Learn your students’ names as soon as possible and use them in class.
5. Designing exams. It is easy to throw everything into an exam (especially the final exam), but you need to ask yourself what the purpose of an exam is. It probably should not be a speed exam, where only the A+ students can finish. Layer it with easy, medium, and hard problems. Layer it with different kinds of problems. For example, take a look at Bloom’s taxonomy and have questions that represent different levels of assessment.

6. Deal with issues fairly. If you make a mistake (and you will), don’t make it worse by handling it poorly. Listen to what students have to say, explain why you are doing what you are doing to “fix” the mistake, and move on.

7. When in doubt, talk to other faculty. You are probably not the first person to encounter whatever challenge you are facing.

8. Create a healthy learning environment. Don’t just teach the way you were taught. You can do better than that!